MOMENTS OF ORDER STATISTICS FROM DOUBLY TRUNCATED BURR XII DISTRIBUTION: A COMPLEMENTARY NOTE WITH APPLICATIONS

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ABSTRACT

We obtain some results on recurrence relations for single and product moments of order statistics from doubly Burr XII distribution. These results complement earlier results of Begum and Parvin (2002), as well as, generalize results obtained by Balakrishnan et. al. (1998) and Saran and Pushkarna (1999).

Simulation results for the mean of the r-th order statistics and for the product moments of order statistics from the distribution are obtained. These results are consistent with those obtained by Begum and Parvin (2002).

Applications of the recurrence relations to least squares estimation of the Best Linear Unbiased Estimates of the location-scale parameters from the distribution are also obtained. We consider some examples involving singly and doubly censored life-testing data and some agricultural data in the presence of missing observations. Numerical results for the vectors of coefficients of the Best Linear Unbiased Estimates of the location-scale parameters are also presented.